

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	"736739".ap.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:58
L2	608	564/163.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L3	317	562/504.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L4	1388	514/563.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L5	9	L3 and L4	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L6	0	L5 and L2	US-PGPUB; USPAT	OR	ON	2007/03/05 12:59
L7	0	L3 and L2	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L8	158	549/83.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L9	550	549/72.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L10	1	L8 and L9	US-PGPUB; USPAT	OR	ON	2007/03/05 13:00
L11	379	549/71.ccls.	US-PGPUB; USPAT	OR	ON	2007/03/05 13:01
L12	3	L11 and L8	US-PGPUB; USPAT	OR	ON	2007/03/05 13:01
S1	6	"736711".ap.	US-PGPUB; USPAT	OR	ON	2006/10/10 10:21
S2	102	562/603.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03
S3	0	562/604.6.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:01
S4	0	562/504.6.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:02
S5	312	562/504.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:02
S6	126	562/622.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:02
S7	1	S2 and S5	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03
S8	0	S2 and S6	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03
S9	1250	514/563.ccls.	US-PGPUB; USPAT	OR	ON	2006/04/24 09:03

EAST Search History

S10	0	S2 and S9	US-PGPUB; USPAT	OR	ON	2006/04/24 09:04
S11	9	S5 and S9	US-PGPUB; USPAT	OR	ON	2006/04/24 09:04
S12	3	S6 and S9	US-PGPUB; USPAT	OR	ON	2006/04/24 09:04
S13	1	"7071355".pn.	US-PGPUB; USPAT	OR	ON	2006/10/09 06:57
S14	0	"736739".pn.	US-PGPUB; USPAT	OR	ON	2006/10/09 06:57
S15	3	"736739".ap.	US-PGPUB; USPAT	OR	ON	2007/03/05 12:44
S16	0	"7071355".ap.	US-PGPUB; USPAT	OR	ON	2006/10/10 10:21
S17	1	"7071355".pn.	US-PGPUB; USPAT	OR	ON	2006/10/10 10:21

10736,739B Yong Chu 3-5-2007

clear of arts except
ODP overcome by TD.

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NEWS	7	NOV 10	STN Express with Discover! free maintenance release Version 8.01c now available
NEWS	8	NOV 20	CA/CAPLUS to MARPAT accession number crossover limit increased to 50,000
NEWS	9	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS	10	DEC 11	CAS REGISTRY chemical nomenclature enhanced
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NEWS	12	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS	13	DEC 18	CA/CAPLUS pre-1967 chemical substance index entries enhanced with preparation role
NEWS	14	DEC 18	CA/CAPLUS patent kind codes updated
NEWS	15	DEC 18	MARPAT to CA/CAPLUS accession number crossover limit increased to 50,000
NEWS	16	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS	17	DEC 27	CA/CAPLUS enhanced with more pre-1907 records
NEWS	18	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS	19	JAN 16	CA/CAPLUS Company Name Thesaurus enhanced and reloaded
NEWS	20	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS	21	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS	22	JAN 22	CA/CAPLUS updated with revised CAS roles
NEWS	23	JAN 22	CA/CAPLUS enhanced with patent applications from India
NEWS	24	JAN 29	PHAR reloaded with new search and display fields
NEWS	25	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS	26	FEB 13	CASREACT coverage to be extended
NEWS	27	FEB 15	PATDPASPC enhanced with Drug Approval numbers
NEWS	28	FEB 15	RUSSIAPAT enhanced with pre-1994 records
NEWS	29	FEB 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS	30	FEB 26	MEDLINE reloaded with enhancements
NEWS	31	FEB 26	EMBASE enhanced with Clinical Trial Number field
NEWS	32	FEB 26	TOXCENTER enhanced with reloaded MEDLINE

NEWS 33 Feb 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 34 Feb 26 CAS Registry Number crossover limit increased from 10,000
to 300,000 in multiple databases

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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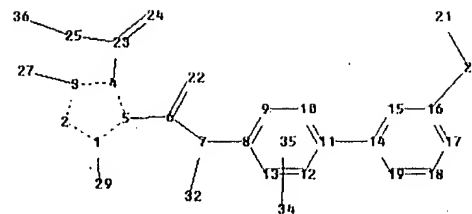
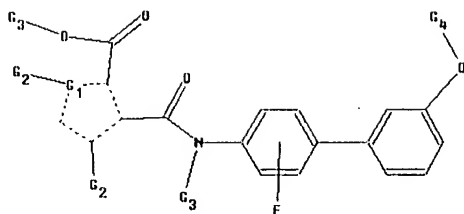
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=>

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chain nodes :

6 7 20 21 22 23 24 25 27 29 32 34 36

ring nodes :

1 2 3 4 5 8 9 10 11 12 13 14 15 16 17 18 19

chain bonds :

1-29 3-27 4-23 5-6 6-7 6-22 7-8 7-32 11-14 16-20 20-21 23-24 23-25 25-36

ring bonds :

1-2 1-5 2-3 3-4 4-5 8-9 8-13 9-10 10-11 11-12 12-13 14-15 14-19 15-16 16-17 17-18 18-19

exact/norm bonds :

1-2 1-5 1-29 2-3 3-4 3-27 4-5 4-23 5-6 6-7 6-22 7-8 7-32 11-14 16-20 20-21 23-24 23-25 25-36

normalized bonds :

8-9 8-13 9-10 10-11 11-12 12-13 14-15 14-19 15-16 16-17 17-18 18-19

G1:C,S

G2:H,OH,CH3

G3:H,CH3

G4:CH3,CH2,CF3

Match level :

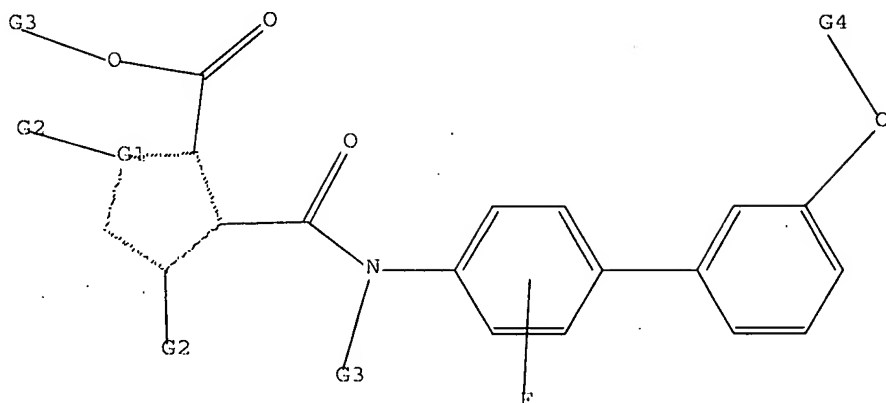
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS 29:CLASS 32:CLASS 34:CLASS 35:Atom 36:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 C, S

G2 H, OH, Me

G3 H, Me

G4 Me, CH2, CF3

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 11:01:29 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2 TO 124

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 11:01:36 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 90 TO ITERATE

100.0% PROCESSED 90 ITERATIONS

27 ANSWERS

SEARCH TIME: 00.00.01

L3 27 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

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ENTRY

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SESSION

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175.04

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=> s l3

L4 6 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:87597 CAPLUS Full-text
DOCUMENT NUMBER: 144:304503
TITLE: Dual Binding Mode of a Novel Series of DHODH Inhibitors
AUTHOR(S): Baumgartner, Roland; Walloschek, Markus; Kralik, Martin; Gotschlich, Astrid; Tasler, Stefan; Mies, Jan; Leban, Johann
CORPORATE SOURCE: 4SC AG, Martinsried, 82152, Germany
SOURCE: Journal of Medicinal Chemistry (2006), 49(4), 1239-1247
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

late

AB Human dihydroorotate dehydrogenase (DHODH) represents an important target for the treatment of hyperproliferative and inflammatory diseases. In the cell DHODH catalyzes the rate-limiting step of the de novo pyrimidine biosynthesis. DHODH inhibition results in beneficial immunosuppressant and antiproliferative effects in diseases such as rheumatoid arthritis. Here, we present high-resoln. X-ray structures of human DHODH in complex with a novel class of low mol. wt. compds. that inhibit the enzyme in the nanomolar range. Some compds. showed an interesting dual binding mode within the same cocrystal strongly depending on the nature of chem. substitution. Measured in vitro activity data correlated with the prevailing mode of binding and explained the obsd. structure-activity relationship. Addnl., the X-ray data confirmed the competitive nature of the inhibitors toward the putative ubiquinone binding site and will guide structure-based design and synthesis of mols. with higher activity.

IT 669063-49-4 669063-57-4 669063-59-6

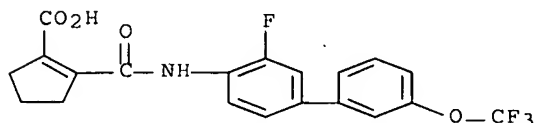
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic

use); BIOL (Biological study); USES (Uses)

(dual binding mode of novel series of DHODH inhibitors)

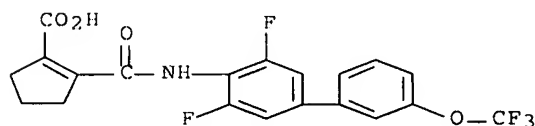
RN 669063-49-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



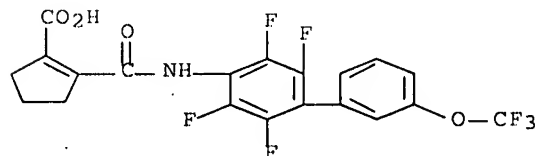
RN 669063-57-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



RN 669063-59-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1251385 CAPLUS Full-text

DOCUMENT NUMBER: 144:150196

TITLE: Biphenyl-4-ylcarbamoyl thiophenecarboxylic acids as potent DHODH inhibitors

AUTHOR(S): Leban, Johann; Kralik, Martin; Mies, Jan; Baumgartner, Roland; Gassen, Michael; Tasler, Stefan

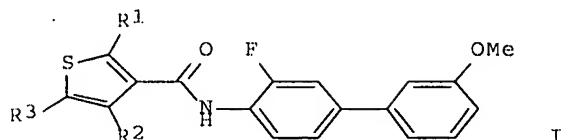
CORPORATE SOURCE: 4SC AG, Martinsried, 82152, Germany

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006), 16(2), 267-270

CODEN: BMCLE8; ISSN: 0960-894X

late

PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:150196
 GI



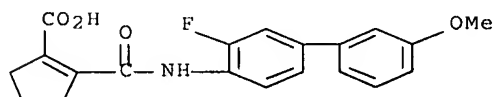
AB A previously discovered dihydroorotate dehydrogenase (DHODH) inhibitor series was further improved by replacing the cyclopentene ring by arom. heterocycles. Different isomers of these compds., e.g. I (R1 = R2 = HO2C, R3 = H; R1 = R3 = HO2C, R2 = H; R1 = H, R2 = R3 = HO2C), were prepd. by the directed ortho-metalation procedure. The compds. are more active than the corresponding cyclopentene analogs and show potent effects on periferal blood mononuclear cell (PBMC) proliferation.

IT 717824-30-1

RL: PAC (Pharmacological activity); BIOL (Biological study)
 (prepn. and biol. evaluation of biphenylcarbonyl thiophene- and furancarboxylic acids as dihydroorotate dehydrogenase inhibitors and periferal blood mononuclear cell antiproliferative agents)

RN 717824-30-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



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REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1024942 CAPLUS Full-text

DOCUMENT NUMBER: 143:398883

TITLE: SAR, species specificity, and cellular activity of cyclopentene dicarboxylic acid amides as DHODH inhibitors

AUTHOR(S): Leban, Johann; Kralik, Martin; Mies, Jan; Gassen, Michael; Tentschert, Karin; Baumgartner, Roland

CORPORATE SOURCE: 4SC AG, Martinsried, 82152, Germany

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005), 15(21), 4854-4857

CODEN: BMCLB6; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:398883

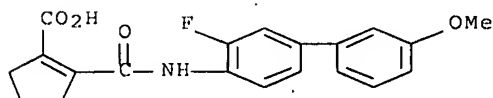
AB Novel DHODH inhibitors were developed based on a previously described series by introduction of heteroatoms into the cyclopentene ring and hydroxyl groups attached to it. Also, the hydrophobic biphenyl side chain was replaced with benzyloxy Ph groups. Activities on human, rat, and mouse enzymes indicate a species specificity of these inhibitors.

IT 717824-30-1P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cyclopentene dicarboxylic acid amides as DHODH inhibitors)

RN 717824-30-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



IT 669063-57-4P 669063-59-6P 717824-35-6P

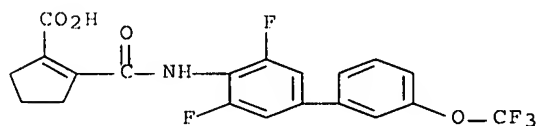
717824-36-7P 867287-88-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cyclopentene dicarboxylic acid amides as DHODH inhibitors)

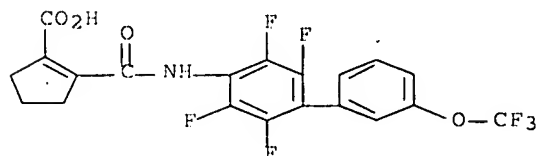
RN 669063-57-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



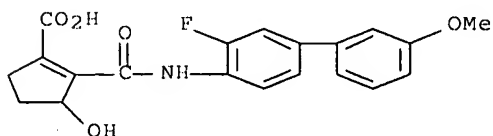
RN 669063-59-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



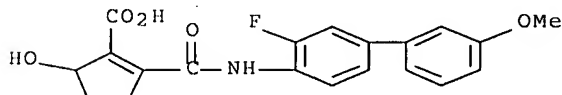
RN 717824-35-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



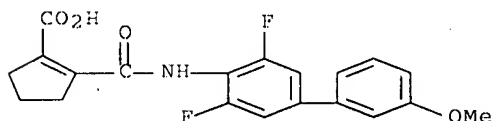
RN 717824-36-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



RN 867287-88-5 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3,5-difluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:550931 CAPLUS Full-text

DOCUMENT NUMBER: 141:99739

TITLE: Dihydroorotate dehydrogenase (DHODH) inhibitors and method for their identification

INVENTOR(S): Leban, Johann; Kramer, Bernd; Baumgartner, Roland; Aulinger-Fuchs, Katharina; Tasler, Stefan

PATENT ASSIGNEE(S): 4SC A.-G., Germany

SOURCE: PCT Int. Appl., 357 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2004056747 A1 20040708 WO 2003-EP14435 20031217
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1541198 A1 20050615 EP 2003-28137 20031205
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

AU 2003300530 A1 20040714 AU 2003-300530 20031217
 US 2004176458 A1 20040909 US 2003-736711 20031217

US 7071355 B2 20060704
 US 2004192758 A1 20040930 US 2003-736742 20031217
 EP 1581478 A1 20051005 EP 2003-813575 20031217
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US 2007027193 A1 20070201 US 2004-736739 20041110

PRIORITY APPLN. INFO.:

DE 2002-10260799 A 20021223
 DE 2002-10260800 A 20021223
 EP 2003-28137 A 20031205
 US 2002-435258P P 20021223
 US 2002-435285P P 20021223
 US 2003-526992P P 20031205
 WO 2003-EP14435 W 20031217

Current Appl.

OTHER SOURCE(S): MARPAT 141:99739

AB The present invention relates to compds. contg. non-arom. ring systems or heteroarom. ring systems, which are capable of binding to the ubiquinone binding site of DHODH. Methods for identification of such compds. are also disclosed.

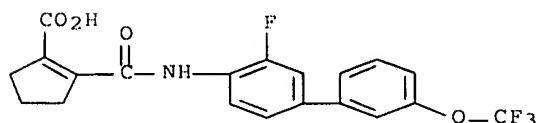
IT 669063-49-4D, complexes with dihydroorotate dehydrogenase
 669063-57-4D, complexes with dihydroorotate dehydrogenase
 669063-59-6D, complexes with dihydroorotate dehydrogenase
 717824-30-1D, complexes with dihydroorotate dehydrogenase
 717824-33-4D, complexes with dihydroorotate dehydrogenase
 717824-34-5D, complexes with dihydroorotate dehydrogenase
 717824-35-6D, complexes with dihydroorotate dehydrogenase
 717824-36-7D, complexes with dihydroorotate dehydrogenase
 717824-53-8 717824-54-9 717824-57-2
 717824-60-7 717824-64-1 717824-86-7
 717825-01-9 717825-16-6 717825-40-6
 717825-46-2

RL: PRP (Properties)

(dihydroorotate dehydrogenase inhibitors and inhibitor identification method)

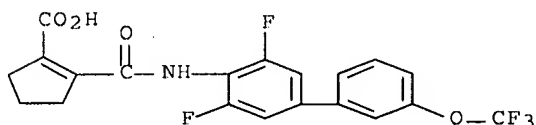
RN 669063-49-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



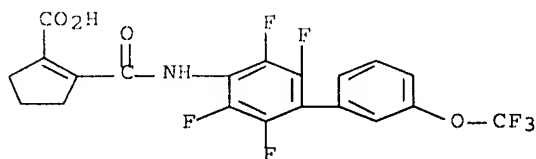
RN 669063-57-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



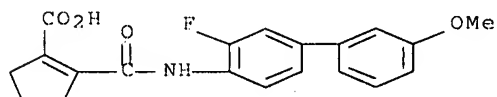
RN 669063-59-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



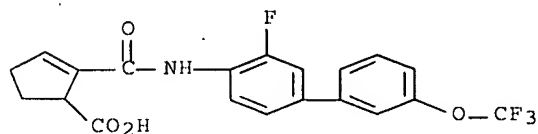
RN 717824-30-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



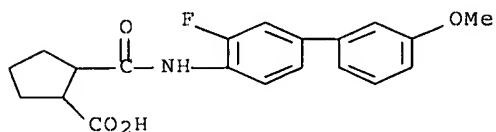
RN 717824-33-4 CAPLUS

CN 2-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



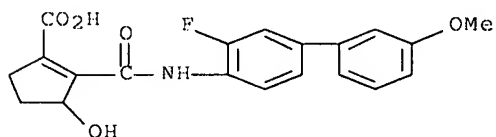
RN 717824-34-5 CAPLUS

CN Cyclopentanecarboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



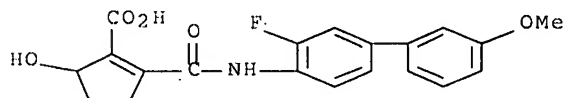
RN 717824-35-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



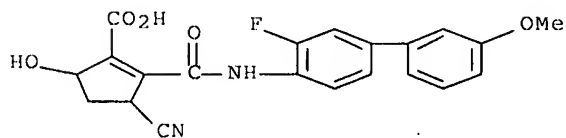
RN 717824-36-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



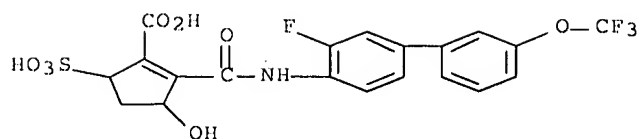
RN 717824-53-8 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



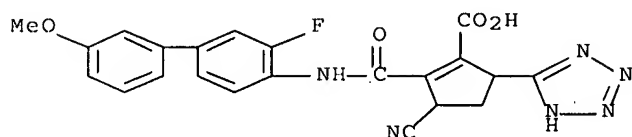
RN 717824-54-9 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy-5-sulfo- (9CI) (CA INDEX NAME)



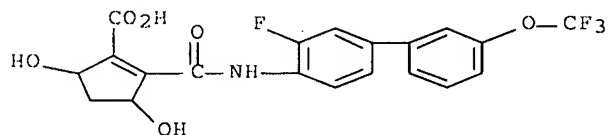
RN 717824-57-2 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]-5-(1H-tetrazol-5-yl)- (9CI) (CA INDEX NAME)



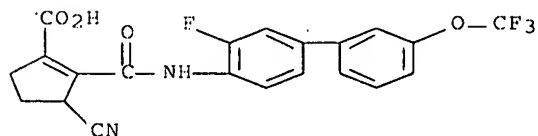
RN 717824-60-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]-3,5-dihydroxy- (9CI) (CA INDEX NAME)



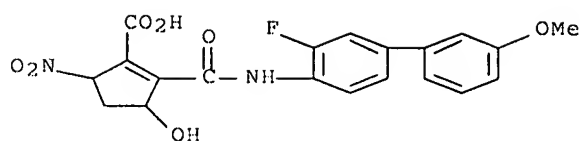
RN 717824-64-1 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



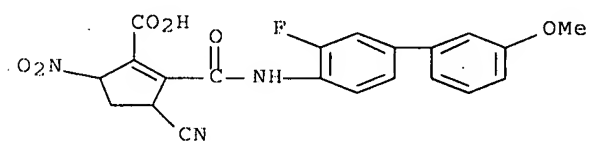
RN 717824-86-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]-3-hydroxy-5-nitro- (9CI) (CA INDEX NAME)



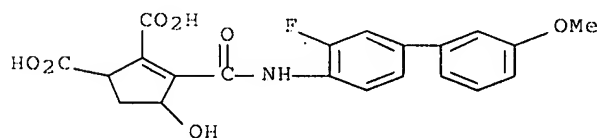
RN 717825-01-9 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-cyano-2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]-5-nitro- (9CI) (CA INDEX NAME)



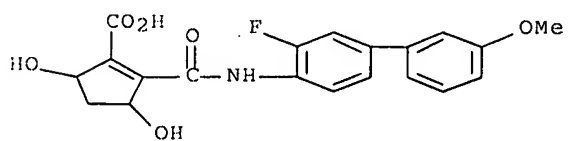
RN 717825-16-6 CAPLUS

CN 2-Cyclopentene-1,2-dicarboxylic acid, 3-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]-4-hydroxy- (9CI) (CA INDEX NAME)



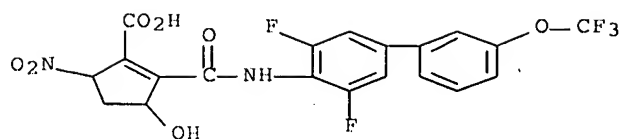
RN 717825-40-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl]amino]carbonyl]-3,5-dihydroxy- (9CI) (CA INDEX NAME)



RN 717825-46-2 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]-3-hydroxy-5-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

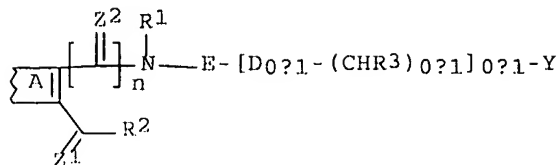
L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2004:550930 CAPLUS Full-text
 DOCUMENT NUMBER: 141:106198
 TITLE: A preparation of cycloalkenedicarboxylic acid derivatives, useful as dihydroorotate dehydrogenase (DHODH) inhibitors
 INVENTOR(S): Leban, Johann; Kralik, Martin
 PATENT ASSIGNEE(S): 4SC A.-G., Germany
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056746	A1	20040708	WO 2003-EP14434	20031217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2509138	A1	20040708	CA 2003-2509138	20031217
AU 2003299316	A1	20040714	AU 2003-299316	20031217
US 2004176458	A1	20040909	US 2003-736711	20031217
US 7071355	B2	20060704		
US 2004192758	A1	20040930	US 2003-736742	20031217
EP 1581477	A1	20051005	EP 2003-799487	20031217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017731	A	20051122	BR 2003-17731	20031217
CN 1732163	A	20060208	CN 2003-80107354	20031217
CN 1732147	A	20060208	CN 2003-80107355	20031217
JP 2006511564	T	20060406	JP 2004-561332	20031217
US 2007027193	A1	20070201	US 2004-736739	20041110
ZA 2005004387	A	20060222	ZA 2005-4387	20050530
IN 2005MN00816	A	20051111	IN 2005-MN816	20050722
PRIORITY APPLN. INFO.:				
			DE 2002-10260800	A 20021223
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			US 2002-435285P	P 20021223
			US 2003-526992P	P 20031205
			WO 2003-EP14434	W 20031217

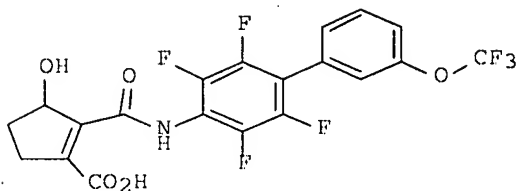
Current
App.

OTHER SOURCE(S):
GI

MARPAT 141:106198



I



II

AB The invention relates to a prepn. of cycloalkenedicarboxylic acid derivs. of formula I [wherein: A is a non-arom. ring contg. 4 to 8 carbon atoms, wherein the ring system comprises at least one double bond and wherein one or more of the carbon atoms in the ring can be replaced by S, O, N, or S(O), etc.; D is O, S, SO₂, or CH₂, etc.; Z1 and Z2 are independently selected from O, S, or NH, etc.; R1 is H or alkyl; R2 is H, OH, O-(cyclo)alkyl, or NH₂, etc.; R3 is H, (cyclo)alkyl, aryl, alkoxy, halogen, or O-aryl, etc.; E is an alkyl or cycloalkyl group or a (mono/poly)cyclic (un)substituted ring system; Y is H, halogen, haloalkyl, haloalkyloxy, alkyl, cycloalkyl, a monocyclic or polycyclic (un)substituted ring system; n is 0 or 1], useful as antiinflammatory, immunomodulatory and antiproliferatory agents. The obtained compds. were screened in inhibition assay for dihydroorotate dehydrogenase (DHODH) activity. For instance, cyclopentenecarboxylic acid deriv. II showed IC₅₀ value (human DHODH) of < 1.μM.

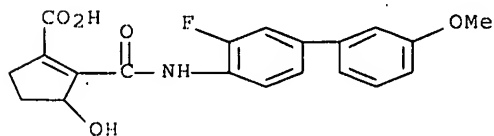
IT 717824-35-6P 717824-36-7P 719301-48-1P
719301-49-2P 719301-50-5P 719301-52-7P
719301-53-8P 719301-54-9P 719301-55-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cycloalkenedicarboxylic acid derivs., useful as antiinflammatory, immunomodulatory and antiproliferatory agents)

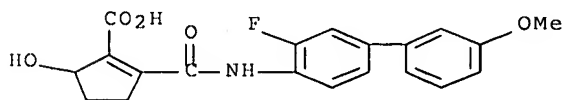
RN 717824-35-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



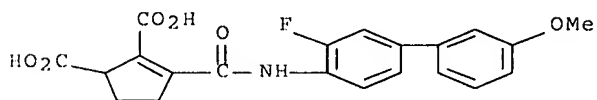
RN 717824-36-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



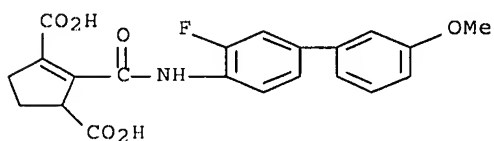
RN 719301-48-1 CAPLUS

CN 2-Cyclopentene-1,2-dicarboxylic acid, 3-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



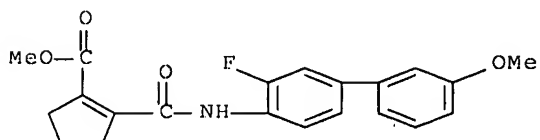
RN 719301-49-2 CAPLUS

CN 1-Cyclopentene-1,3-dicarboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



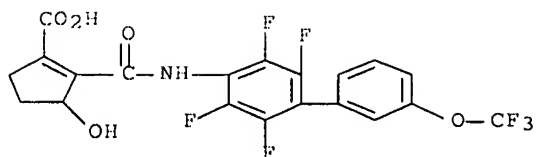
RN 719301-50-5 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3-fluoro-3'-methoxy[1,1'-biphenyl]-4-yl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)



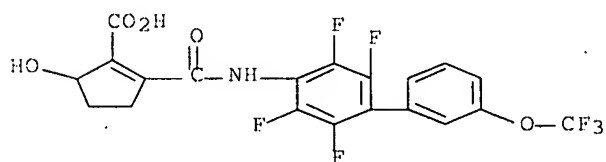
RN 719301-52-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 3-hydroxy-2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



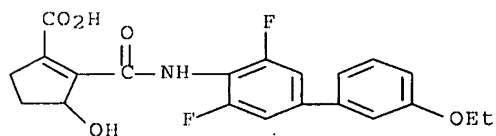
RN 719301-53-8 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 5-hydroxy-2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



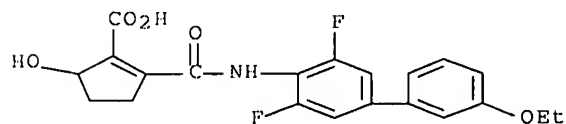
RN 719301-54-9 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3'-ethoxy-3,5-difluoro[1,1'-biphenyl]-4-yl)amino]carbonyl]-3-hydroxy- (9CI) (CA INDEX NAME)



RN 719301-55-0 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[(3'-ethoxy-3,5-difluoro[1,1'-biphenyl]-4-yl)amino]carbonyl]-5-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:981447 CAPLUS Full-text

late.

DOCUMENT NUMBER: 140:246103
TITLE: Discovery of a novel series of DHODH inhibitors by a docking procedure and QSAR refinement
AUTHOR(S): Leban, Johann; Saeb, Wael; Garcia, Gabriel; Baumgartner, Roland; Kramer, Bernd
CORPORATE SOURCE: Martinsried, 82152, Germany
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(1), 55-58
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:246103

AB A novel series of DHODH (dihydroorotate dehydrogenase) inhibitors was developed based on a lead which was obtained by a docking procedure and a medicinal chem. exploration. The activity of the initial lead was improved by a QSAR method to yield low nanomolar inhibitors.

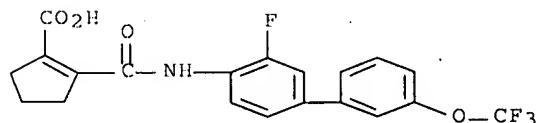
IT 669063-49-4P 669063-57-4P 669063-59-6P
669063-68-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(discovery of a novel series of dihydroorotate dehydrogenase inhibitors by a docking procedure and QSAR refinement)

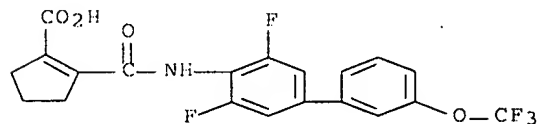
RN 669063-49-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3-fluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



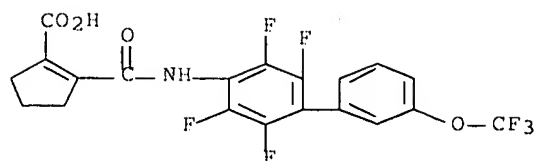
RN 669063-57-4 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3,5-difluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



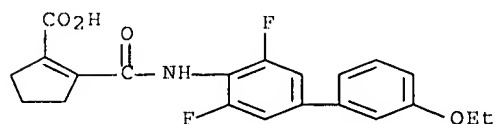
RN 669063-59-6 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[2,3,5,6-tetrafluoro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]amino]carbonyl]- (9CI) (CA INDEX NAME)



RN 669063-68-7 CAPLUS

CN 1-Cyclopentene-1-carboxylic acid, 2-[[[3'-ethoxy-3,5-difluoro[1,1'-biphenyl]-4-yl)amino]carbonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Executing the logoff script...

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FULL ESTIMATED COST	32.09	207.13
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CA SUBSCRIBER PRICE	-4.68	-4.68

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